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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/621,728	07/17/2003	Pedro Lamartine de Faria	17945	1583

26794 7590 09/02/2004

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EXAMINER	
FIGUEROA, FELIX O	

ART UNIT	PAPER NUMBER
2833	

DATE MAILED: 09/02/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No.	Applicant(s)	
	10/621,728	DE FARIA ET AL.	
	Examiner	Art Unit	
	Felix O. Figueroa	2833	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *28 June 2004*.

2a)☒ This action is **FINAL**. 2b)☐ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *2-4 and 6-26* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *2-4 and 6-26* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☒ The drawing(s) filed on *28 June 2004* is/are: a)☐ accepted or b)☒ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☐ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☐ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) Paper No(s)/Mail Date _____.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____.
5) ☐ Notice of Informal Patent Application (PTO-152)
6) ☐ Other: _____.

DETAILED ACTION

Drawings

The drawings are objected to under 37 CFR 1.84(h)(1). When an exploded view is shown in a figure which is on the same sheet as another figure, the exploded view should be placed in brackets. Please note that Figure 4 show element that are not connected to each other physically or by a joining line, thus it is considered an exploded view.

The drawings are objected to under 37 CFR 1.83(a). Please note that while the specification descridgees the connectors 410 and 430 to be movable after the ridges 428 and 448 engage each other, the headers shown in Figure 4 do not appear that movable after the ridges 428 and 448 are engaged. Any structural detail that is essential for a proper understanding of the disclosed invention should be shown in the drawing. MPEP § 608.02(d). Please note that it appears (as shown in Fig.4) that after the ridges are engaged with each other, no further movement will be possible.

A proposed drawing correction or corrected drawings are required in reply to the Office action to avoid abandonment of the application. The objection to the drawings will not be held in abeyance.

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

> A person shall be entitled to a patent unless –
>
> (b) the invention was patented or descridgeed in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

Claims 2, 3, 6, 7 and 10-26 are rejected under 35 U.S.C. 102(b) as being anticipated by Matsuoka (US 5,443,404).

Matsuoka discloses a connector assembly comprising: a first housing (2) having a retention arm (11); and a second housing (2) having an opening (9) for receiving the retention arm, wherein the retention arm is mounted in the opening and the first housing and the second housing are moveably connected; wherein the first housing and the second housing have a lower side (bottom of Fig.3) for connecting to a PCB (7); and wherein the lower side includes guide pins (4a) that align the first and second housing with the PCB.

Regarding claim 2, Matsuoka discloses the first housing and the second housing being moveably connected in a longitudinal direction.

Regarding claim 3, Matsuoka discloses the first housing including a first ridge (at 8a) proximate a terminating end of the retention arm, and the second housing including a second ridge (at 8b) within the opening, wherein the first ridge and the second ridge engage one another to hold the retention arm in the opening.

Claims 3, 6-9, 11-13 and 15-17 are rejected under 35 U.S.C. 102(b) as being anticipated by Weber et al. (US 4,790,763).

Weber discloses connector assembly comprising: a first housing (F) having a retention arm (26); and a second housing (E) having an opening (at 46) for receiving the retention arm, wherein the retention arm is mounted in the opening and the first housing and the second housing are moveably connected; wherein the first housing and the second housing have a lower side (left side of Fig.3) for connecting to a PCB (M); and

wherein the lower side includes guide pins (12) that align the first and second housing with the PCB.

Regarding claim 3, Weber discloses the first housing including a first ridge (at 34) proximate a terminating end of the retention arm, and the second housing including a second ridge (at 50) within the opening, wherein the first ridge and the second ridge engage one another to hold the retention arm in the opening.

Regarding claim 7, Weber discloses the lower side of the housing including guide pins (12).

Regarding claim 8, Weber discloses the second housing further includes a guide (22,42) for aligning the first housing and the second housing.

Regarding claim 9, Weber discloses a guide (22) for aligning the first housing and the second housing.

Regarding claim 11, Weber discloses a plurality of retention arms and openings (see Fig.2).

Regarding claim 12, Weber discloses an adjustable pin header assembly comprising at least one first header (F) having an upper side for receiving periphery, a lower side having contact pins (70) extending therefrom in alignment with corresponding vias in a PCB, and a female connection mechanism (28), and at least one second header (E) having an upper side for receiving periphery, a lower side having contact pins extending therefrom in alignment with corresponding vias in the PCB, and a male connection mechanism (48), wherein the at least one second header is secured to the

at least one first header by mounting the male connection mechanism in the female connection mechanism.

Regarding claims 13 and 17, Weber discloses the at least one first header and the at least one second header being moveable longitudinally with respect to one another. Please note that the headers can move with respect to each other when they are not connected to each other.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or descridgeed as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

Claim 4 is rejected under 35 U.S.C. 103(a) as being unpatentable over Matsuoka in view of Sato (US 6,343,959).

Matsuoka discloses substantially the claimed invention except for the retention arm abutting the end of the opening. Sato shows a retention arm (13) movable from a point where the first ridge (13a) and the second ridge (12a) engage and a point where the retention arm abuts an end of the opening in order to provide a better lock while allowing flexure deformation. This structure is an art recognized equivalent structure for retention structure of Matsuoka. Therefore, because these two retention structures were art-recognized equivalents at the time the invention was made, one of ordinary skill in the art would have found it obvious to substitute of the retention structure of Sato

for the retention structure of Matsuoka to provide a better lock while allowing flexure deformation.

Response to Arguments

Applicant's arguments filed June 28, 2004 have been fully considered but they are not persuasive.

In response to Applicant's arguments that Matsuoka "fails to disclose, teach or suggest an assembly including 'first' and 'second' moveably connected housings wherein a lower side of one of the housings includes 'guide pins' for aligning the housing with a printed circuit board", please note that at least some of the elements 4a of Matsuoka are guide pins, since they guide alignment of the housing with the PCB. Furthermore, the claim does not recite any structure differentiating from elements 4a of Matsuoka.

In response to Applicant's arguments (regarding claims 7, 12 and 15) that Weber "fails to disclose, teach or suggest an assembly including 'first' and 'second' moveably connected housings wherein a lower side of one of the housings includes 'guide pins' for aligning the housing with a printed circuit board", please note that Weber discloses (in Fig.1c) guide pins (12) on the lower side of the housing for aligning the housing with a printed circuit board.

Conclusion

Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP

§ 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Felix O. Figueroa whose telephone number is (571) 272-2003. The examiner can normally be reached on Mon.-Fri., 10:00am-6:00pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Paula A. Bradley can be reached on (571) 272-2800 Ext. 33. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

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THO D. TA
PRIMARY EXAMINER